

ABSTRACT OF THE INVENTION

Genetic constructs, transformation vectors and methods are taught for production of transgenic plants which can be selectively removed from a growing site by application of a chemical agent or physiological stress. The invention links a target gene for the trait of commercial interest to a conditionally lethal gene, which can be selectively expressed to cause plant death. By use of the genetic constructs, transformation vectors and methods of the present invention, invasion of environments and contamination of commercial non-engineered productions by transgenic plants can be avoided. Methods are also taught for transformation of *Brassica* species.